

ABSTRACT OF THE DISCLOSURE

In order to realize a low-cost and small-sized optical transmitting module, which overcomes a bad influence of fluctuation in environment temperature on a FP laser for the optical communication, a heater 2 is sandwiched between the sub-mount 5 and the semiconductor laser 1 to increase temperature of the semiconductor 1 through the use of the heater 2. The temperature of the semiconductor laser 1 is sensed through the used of the temperature sensor 6, and the heater 2 is controlled through the use of the temperature control module 3 to keep the temperature of the semiconductor laser 1 higher than room temperature.

According to the present invention, since the temperature is kept constant at high temperatures, it is not affected by fluctuation in environment temperature, but fluctuation in the oscillation wavelength becomes small. Therefore, the transmission distance during high-speed modulation can be extended. Also, the transmitting module is small-sized, which leads to low cost and low power consumption.